

BEFORE THE UTAH WATER POLLUTION CONTROL COMMITTEE

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In the Matter of:

STIPULATION AND CONSENT ORDER

Trojan Corporation

Docket Number GW 90-01

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This STIPULATION AND CONSENT ORDER is issued by the Utah Water Pollution Control Committee (the "Committee") representing the State of Utah (the "State") pursuant to the Utah Water Pollution Control Act (the "Act"); Section 16-11-1 et seq., Utah Code Annotated, 1953 as amended.

STIPULATION

1. The parties agree that the Committee has jurisdiction over this matter.
2. Trojan Corporation ("Trojan") is a Utah corporation which operates facilities located at 8439 Canyon Road, Spanish Fork, Utah.
3. Trojan develops and manufactures commercial explosives at these facilities.
4. On or about June 16, 1986, a large quantity of nitric acid was released as a result of a liner failure in a storage pond at Trojan's operations.
5. Since World War II an explosive manufacturing plant has been operated at the present Trojan site.
6. Prior to 1988 the wastewater disposal practices of Trojan and its predecessors may have included disposal of industrial waste from explosive production into unlined pits and ponds.
7. Wastewater disposal by Trojan is subject to the requirements of the Utah Water Pollution Control Act, Water Pollution Control Rules, R448 Utah Administrative Code (The Code).
8. Trojan is subject to all applicable provisions of the Code.
9. Since the summer of 1988, Trojan has voluntarily pursued a field program to evaluate the extent of ground water contamination by nitrate as a result of the pond liner failure at the Trojan facility. This investigation has been overseen by the Committee.
10. Notice of Violation and Order (Docket No. GW 90-01) was issued to Trojan by the Committee on August 3, 1990 based upon certain alleged circumstances and a site inspection of April 18, 1990.
11. Trojan responded by letter in a timely manner to the NOV/Order (Docket No. GW 90-01) on September 10, 1990 and requested a hearing pursuant to 26-11-12 Utah Code Ann.
12. The parties now desire to resolve this matter fully without further admissions and without further administrative or judicial proceedings except to the extent provided below by entering into this CONSENT ORDER. By so doing, Trojan withdraws its request for a hearing before the Committee.
13. NOV/ORDER (Docket No. GW 90-01) shall be resolved by completion of terms of this agreement.

14. For the purpose of this CONSENT ORDER the parties agree and stipulate to the above stated facts. None of the stipulations related herein shall be considered admissions by any person related or unrelated to this CONSENT ORDER for purposes other than determining the basis of this CONSENT ORDER.

15. In anticipation of the requirements of the Utah Solid and Hazardous Waste Committee (SHWC) as set forth at R450-8-6.12 (40 C.F.R. § 264.101), Trojan wishes to conduct voluntary corrective action at waste management units located at the facility, including the North Impoundment and the PETN Packhouse sump sites. Concurrent with the execution of this agreement, Trojan will execute an agreement with the SHWC pertaining to these voluntary corrective action activities conducted at waste management units.

16. The waste management units which are subject to the requirements of the SHWC as set forth at R450-8-6.12 (40 C.F.R. § 264.101) constitute "facilities or portions of facilities with active ground water remediation programs conducted under the Resources Conservation and Recovery Act (RCRA)" and are, therefore, subject to the permit by rule provision of the Utah Ground Water Protection Regulations set forth at R448-6-6.2.

17. The Committee agrees to work closely with the SHWC in the oversight of the off-site hydrogeologic investigation and corrective action described below.

ORDER

1. In settlement of the violations alleged in the August 3, 1990 Notice of Violation, a penalty amount has been calculated, utilizing the Committee's Civil Penalty Policy, that takes into account factors such as the magnitude of the violations, the potential degree of environmental harm, the degree of good faith shown by Trojan, as well as the costs already incurred and to be incurred by Trojan to conduct the hydrogeologic studies and mitigation associated with this matter. The Bureau has also taken into account certain payments already made and commitments by Trojan to make additional payments to local governments for the upgrade of water supply facilities. The Bureau has assessed and Trojan agrees to a penalty in the amount of \$400,000.00 which shall be satisfied as follows:

1. Trojan shall pay the sum of \$125,000.00 to the Utah Bureau of Water Pollution Control, P.O. Box 16690, Salt Lake City, Utah 84116-0690 within 30 days of entry into this order.
2. \$75,000.00 of the penalty shall be credited contingent upon a penalty payment of that amount to the Bureau of Solid and Hazardous Waste.
3. \$100,000.00 shall be suspended contingent upon full and complete performance

of the terms of this agreement.

4. The remainder shall be credited upon submission of documentation of payment to local governments for water supply well rehabilitation or replacement.

2. Trojan shall submit, within 60 calendar days of the execution of this CONSENT ORDER, a detailed workplan with specific intermediate steps and timeframes for each step to complete a detailed hydrogeologic investigation and compilation of a report that describes ground water contamination by nitrate and other explosive waste in southern Utah Valley that may have occurred as result of Trojan operations. The workplan shall include but is not limited to the following items:

a. Determination of the geographic (lateral) extent, in each affected aquifer, of ground water contamination by nitrate and other explosive wastes in southern Utah Valley that may have occurred as a result of Trojan operations.

b. Identification of each potentially contaminated aquifer, its location vertically and horizontally, as well as aquifer thickness. For each potentially contaminated aquifer, hydrogeologic information shall be determined and reported, including but not limited to: ground water gradient, water level maps, transmissivity, porosity, and storage properties. In addition, the information shall include data for a minimum of four quarterly rounds of ground water monitoring from a representative well network including but not limited to the following constituents:

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|----------------------------|------------------------------|--|---------------|
| Calcium (Ca) | Magnesium (Mg) | Sodium (Na) | Potassium (K) |
| Chloride (Cl) | Sulfate (SO ₄) | Bicarbonate/Carbonate (HCO ₃ /CO ₃) | |
| Nitrate (NO ₃) | Phosphate (PO ₄) | Total Dissolved Solids (TDS) | |
| Field pH | | | |

and data for a minimum of two rounds of ground water monitoring from a representative well network including the following constituents:

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|-------------------------------------|-------------------------------------|
| RDX (cyclotrimethylenetrinitramine) | PETN (pentaerythritol tetranitrate) |
| TNT (trinitrotoluene) | |

Where data for more than four quarterly rounds of ground water monitoring are available this data shall be incorporated into the report.

c. Evaluation and location of other potential sources of nitrates to the ground water of southern Utah Valley.

- d. Evaluation of the potential routes of migration of nitrates from the Trojan facility
- e. Identification of interim remediation/mitigation/clean-up measures to address known contamination of ground water that may have occurred as a result of Trojan operations.
- f. A conceptual ground water modeling study plan in sufficient detail to assure all requisite inputs for the full scale modeling effort are obtained in the hydrogeologic study.

The Executive Secretary shall review the workplan for the hydrogeologic site investigation, or revisions thereto, and notify Trojan of its approval or disapproval of the workplan. In the event of any disapproval, the Executive Secretary shall specify the deficiencies in writing. Within 30 calendar days of receipt of written deficiencies, Trojan shall submit a revised workplan that corrects the specified deficiencies. Upon approval of the workplan by the Executive Secretary, Trojan shall execute the workplan in accordance with the timeframes specified in the plan. The workplan shall include the submission of quarterly status reports by Trojan that describe the accomplishments to date on the workplan and documents the implementation of the workplan steps.

Trojan shall complete the detailed hydrogeologic site investigation and submit the written report in accordance with a schedule presented in the workplan. Upon submission of the hydrogeologic site investigation report, the Executive Secretary shall review the report, or revisions thereto, and notify Trojan of any deficiencies in the report in writing or of acceptance of the report in fulfillment of this stipulation. Within 45 calendar days of receipt of any deficiencies Trojan shall submit a revised report, or sections thereto, that corrects the specified deficiencies.

3. Within 60 calendar days of the date of approval of the hydrogeologic site investigation report, Trojan shall submit a workplan to complete a ground water modeling study as described in this paragraph. The workplan will have specific intermediate steps and objectives detailing the modeling effort with specific timeframes for each step. The Executive Secretary will review and advise Trojan if the workplan or revisions thereto appears adequate or if any deficiencies exist. Within 30 calendar days of receipt of any deficiencies, Trojan shall submit a revised workplan that corrects the specified deficiencies. Upon approval of the workplan by the Executive Secretary, Trojan shall execute the workplan in accordance with the timeframes and steps specified in the plan.

Trojan shall complete and submit within 180 calendar days from the date of approval of the ground water modeling study workplan by the Executive Secretary, a ground water modeling study report that evaluates future movement and the extent of ground water contamination by nitrates and other explosive waste in southern Utah Valley that may have occurred as result of Trojan operations. The Executive Secretary will review and advise Trojan if the report or revisions thereto appears adequate or if any deficiencies exist. Within 45 calendar days of receipt of any deficiencies, Trojan shall submit a revised report, or sections thereto, that corrects the

specified deficiencies. The study shall follow the workplan approved by the Executive Secretary.

Within 180 days of approval of the ground water modeling study report by the Executive Secretary, Trojan will submit an off-site contamination feasibility study. This will include a study of measures, with implementation timeframes, to address significant contamination. Alternatives for clean up of contaminated ground water, and/or mitigation of impacts from contaminated ground water, and/or reduction of contaminant sources, with costs for both, shall be included and Trojan shall identify a preferred alternative. The Executive Secretary shall review the feasibility study report and notify Trojan of its approval or disapproval of the report. In the event of any disapproval, the Executive Secretary shall specify the deficiencies in writing. Within 45 calendar days of receipt of written deficiencies, Trojan shall submit a revised feasibility study report that corrects the specified deficiencies.

Trojan shall implement the approved measures for clean up, mitigation, and or source reduction of ground water contamination that can reasonably be attributed to Trojan's operations in accordance with the approved schedule.

4. Trojan shall submit a comprehensive wastewater treatment plan to further treat the wastewater discharges and obtain construction permits for wastewater treatment systems to be utilized for each aspect of Trojan's plant operations that treat and/or discharge wastewater, in accordance with the following schedule:

- a. Within 60 calendar days of the execution of this CONSENT ORDER, submission of a conceptual plan for review and approval by the Executive Secretary.
- b. Within 120 calendar days of approval of the conceptual plan by the Executive Secretary, submission of a detailed wastewater treatment plan for review and approval by the Executive Secretary. Specific steps and timeframes for implementation of approved plans shall be included in the plan.

Upon review of either the conceptual or detailed plan, or revisions thereto, the Executive Secretary shall notify Trojan of approval or disapproval of the plan. In the event of any disapproval, the Executive Secretary shall specify the deficiencies in writing. Within 45 calendar days of receipt of written deficiencies, Trojan shall submit a revised plan that corrects the specified deficiencies. Upon approval of the plan by the Executive Secretary, Trojan shall implement the approved measures in accord with the timeframes specified in the plan.

5. Trojan shall cease discharge of contaminants into the North Impoundment within 30 days of the execution of this agreement.

6. Trojan shall in addition to the settlement in paragraph one, pay stipulated penalties to the Bureau of Water Pollution Control in the event Trojan fails to meet the deadlines for each workplan, report, deficiency response thereto, implementation of approved remediation/mitigation/clean-up measures and approved wastewater treatment facilities as follows:

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| Submission of Hydrogeologic Investigation Workplan | \$250.00___ per day |
| Hydrogeologic Site Investigation Report | \$500.00___ per day |
| Quarterly Status Reports | \$250.00___ per day |
| Ground Water Modeling Study Workplan | \$250.00___ per day |
| Ground Water Modeling Study Report | \$500.00___ per day |
| Off Site Contamination Feasibility Study | \$500.00___ per day |
| Conceptual Wastewater Treatment Plan | \$250.00___ per day |
| Detailed Wastewater Treatment Plans | \$500.00___ per day |
| Deficiency Responses to any of the above | \$500.00___ per day |
| Implementation of Wastewater Treatment Plans | \$500.00___ per day |
| Implementation of Mitigation/Cleanup measures | \$1000.00___ per day |

Amounts payable under this provision will be remitted within 30 days of notice from the Executive Secretary that a deadline has been exceeded.

Trojan may petition the Executive Secretary for extension of any deadline imposed by this order for reasonable cause prior to the deadline. The Executive Secretary shall evaluate the petition and either grant an extension or deny it. Trojan may appeal any denied extension to the Water Pollution Control Committee within 10 days of receipt of the denial. In the event of denial of a requested extension, the Committee may require payment of all or part of the suspended penalties referenced in Paragraph 1 of this order.

7. Trojan shall reimburse the Executive Secretary for the costs of reviewing and overseeing compliance with the Work Plans referenced herein. The Executive Secretary shall submit periodic invoices to Trojan identifying the oversight and review costs. Within thirty (30) days of receipt of each such invoice, Trojan shall remit a check to the State for the full amount of those costs, payable to the Utah Bureau of Water Pollution Control, P.O. Box 16690, Salt Lake City, Utah 84116-0690. In the event of a dispute between Trojan and the Executive Secretary regarding oversight and review costs, Trojan shall have the right to seek review by the Committee as provided for in paragraph 9 of this order.

8. Nothing in this CONSENT ORDER shall constitute or be construed as a waiver by the State of its right to initiate enforcement action, including civil penalties, against Trojan in the event of future noncompliance with the Utah Water Pollution Control Act, nor shall the State be precluded in any way from taking appropriate action to abate an imminent endangerment to public health or the environment should such a situation arise at Trojan's facilities. Except as provided in paragraph one, nothing in this CONSENT ORDER shall constitute or be construed as a release from any claim, to include natural resource damage claims, cause of action, or demand in law or equity which the State or Trojan may have against each other or any person, firm, partnership, or corporation for any liability arising out of or relating in any way to the release of pollutants to waters of the State.

9. This CONSENT ORDER expressly contemplates submission of certain plans, proposals and reports by Trojan to the Executive Secretary for his review and approval. Where opportunity

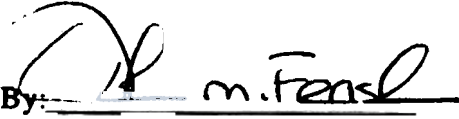
for review and approval is provided, Trojan shall not proceed with the proposed activity unless and until approvals have been received. If agreement by Trojan and the Executive Secretary cannot be reached regarding any plan, proposal or report under this CONSENT ORDER, Trojan or the Executive Secretary may commence a declaratory order proceeding under the Utah Administrative Procedures Act and applicable regulations of the Committee to resolve the disputed plan, proposal or report. The Committee's decision in any adjudicative proceeding shall constitute final agency action and be subject to judicial review under applicable state law.

10. Trojan's failure to meet or satisfy any requirements set out in this CONSENT ORDER shall be excused for a reasonable time to the extent the failure is caused by events beyond Trojan's control, including without limitation acts of God, public enemy, unforeseen strikes or work stoppages, fire, explosion, flood, tornado, earthquake, lightning, riot, sabotage or war.


This CONSENT ORDER shall become effective upon execution by Trojan and the Executive Secretary of Utah Water Pollution Control Committee.

DATED this 2nd day of August, 1991

Trojan corporation

By: 
Title Executive Vice President

Utah Water Pollution Control
Committee

By: 
Don A. Ostler, P.E.
Executive Secretary